

## Tennessee Department of Environment and Conservation Division of Water Resources

William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243 1-888-891-8332 (TDEC)

## Municipal Separate Storm Sewer System (MS4) Annual Report

## 1. MS4 INFORMATION

Cit	y Of	Shelbyville	TNSO75531				
Na	me o	of MS4	MS4 Permit N	Number			
Ma	ırk (	Clanton	Mark.clanton	@shelbyvilletn.or	g		
Na	me c	of Contact Person	Email Addres	SS			
93	l-684	4-2644					
Te	epho	one (including area code)					
20	l No	rth Spring Street					
		g Address					
Sh	elbyy	ville	TN	37160			
Cit	У		State	ZIP code			
Wl	nat is	s the current population of your MS4? 20,350	)+				
Wł	nat is	the reporting period for this annual report?	From 8/24/2014	to 8/30/201	5		
2.	WA	ATER QUALITY PRIORITIES (SECTION 3.1)					
		Does your MS4 discharge into waters listed as (d) list and/or according to the on-line GIS mapp		nost current		⊠ Yes	□ No
	B.	If yes, please attach a list all impaired waters w	vithin your jurisdicti	onal area.			
	C.	Does your MS4's jurisdictional area contain an other than pathogens, siltation and habitat altera	y waterbodies wher ations? If yes, pleas	e a TMDL has be se attach a list.	en appr	roved for ⊠ Yes	parameters
	D.	Does your MS4 discharge to any Exceptional T National Resource Waters (ONRWs)? If yes, p		or Outstanding		⊠ Yes	□No
	E.	Are you implementing additional specific prove ETWs or ONRWS located within your jurisdic		continued integrit	y of	⊠ Yes	□No
3.	Pro	TECTION OF STATE OR FEDERALLY LISTED SE	PECIES (SECTION 3.	2.1 General Perr	nit for	Phase II	I MS4s)
	A.	Are there any state or federally listed species w	vithin the MS4's juri	isdiction?	⊠ Ye	es	□ No
	В.	Are any of the MS4 discharges or discharge-re any state or federally listed species?	lated activities likely	y to jeopardize	□ Y€	es	⊠ No
	C.	Please attach any authorizations or determination discharges on state or federally listed species.	ons by U.S. Fish &	Wildlife Service	on the e	effect of	the MS4
4.	PU	BLIC EDUCATION AND PUBLIC PARTICIPATION	N (SECTION 4.2.1 A	ND 4.2.2)			
	A.	Have you developed a Public Information and l	Education plan (PIE	))?		⊠ Yes	□ No
	В.	Is your public education program targeting spe	ecific pollutants and	sources of those		⊠ Yes	□No

continued

## Municipal Separate Storm Sewer System (MS4) Annual Report

C. If yes, what are the specific causes, sources and/or pollutants addressed by your public education program? We educate the children about keeping the storm sewers and ditches clean of debree and pollutants so our water ways and receiving streams will remain a strong, vibrant part of our community. We also educate the children and the community about the dangers of flood waters and the importance of Permanent Stormwater (BMP'S) for water quality. D. Note specific successful outcome(s) (NOT tasks, events, publications) fully or partially attributable to your public education program during this reporting period. The camp where we tought Stormwater education classes last year has been cleaning ditches on there own and kids have been removing debree from storm sewer grates to help keep our water ways clean. We like to think that educating the children of our community will help this trend build. Do you have an advisory committee or other body comprised of the public and other ⊠ Yes □ No stakeholders that provides regular input on your stormwater program? How do you facilitate, advertise, and publicize public involvement and participation opportunities? We advertise our program events in the Shelbyville Times Gazette newspaper and on our website at Cityofshelbyvilletn.org/Publicworks/Stormwater. We also use our Shelbyville Public Works facebook page to advertise upcoming stormwater events. ΠNo ⊠ Yes G. Do you have a webpage dedicated to your stormwater program? If so, what is the link/URL: Cityofshelbyvilletn.org/Publicworks/Stormwater H. Are you tracking and maintaining records of public education, outreach, involvement ⊠ Yes ☐ No and participation activities? Please attach a summary of these activities. 5. ILLICIT DISCHARGE DETECTION AND ELIMINATION (SECTION 4.2.3) Have you completed a map of all outfalls and receiving waters of your storm sewer ☐ No ⊠ Yes system? ☐ No Have you completed a map of all storm drain pipes of storm sewer system? ⊠Yes B. How many outfalls have you identified in your system? 14 C. Have any of these outfalls been screened for dry weather discharges? ⊠Yes ☐ No D. Outfalls are screened once yearly during What is your frequency for screening outfalls for illicit discharges? F. dry wheather audit and checked by mowing crews on a routine basis as they run there normal routes through the entire city. ☐ No Do you have an ordinance that effectively prohibits illicit discharges? ⊠ Yes During this reporting period, how many illicit discharges/illegal connections have you discovered (or been H. reported to you)? Of those illicit discharges/illegal connections that have been discovered or reported, how many have been I. eliminated? CONSTRUCTION SITE STORMWATER RUNOFF (SECTION 4.2.4) A. Do you have an ordinance or adopted policies stipulating:  $\square$  No ⊠ Yes Erosion and sediment control requirements? П No ⊠ Yes Other construction waste control requirements? ☐ No Requirement to submit construction plans for review? ⊠ Yes □ No MS4 enforcement authority? B. How many active construction sites disturbing at least one acre were there in your jurisdiction this reporting period?6

#### Municipal Separate Storm Sewer System (MS4) Annual Report C. How many of these active sites did you inspect this reporting period? D. On average, how many times each, or with what frequency, were these sites inspected Weekly (e.g., weekly, monthly, etc.)? ⊠Yes □ No E. Do you prioritize certain construction sites for more frequent inspections? If Yes, based on what criteria? Location of outfalls 7. PERMANENT STORMWATER CONTROLS (SECTION 4.2.5) Do you have an ordinance or other mechanism to require: ⊠ Yes ΠNo Site plan reviews of all new and re-development projects? □ No ⊠ Yes Maintenance of stormwater management controls? ⊠ Yes □ No Retrofitting of existing BMPs with green infrastructure BMPs? What is the threshold for new/redevelopment stormwater plan review? (e.g., all projects, projects disturbing В greater than one acre, etc.) All projects go through afull city review process. Have you implemented and enforced performance standards for permanent stormwater ⊠ Yes $\square$ No controls? Do these performance standards go beyond the requirements found in Section 4.2.5.2 and require that predevelopment hydrology be met for: □ No Flow volumes □ No Peak discharge rates ⊠ Yes ☐ No Discharge frequency ☐ No ⊠ Yes Flow duration Please provide the URL/reference where all permanent stormwater management standards can be found. E. Cityofshelbyvilletn.org/publicworks/Stormwater Mangement Manual/ section 6.7.5 How many development and redevelopment project plans were reviewed for this reporting period? <u>15</u> F. How many development and redevelopment project plans were approved? <u>15</u> G. 54 private/4 city owned How many permanent stormwater management practices/facilities were inspected? H. How many were found to have inadequate maintenance? 0 I. Of those, how many were notified and remedied within 30 days? (If window is different than 30 days, please J. specify) 0 How many enforcement actions were taken that address inadequate maintenance? 0 K.

O. How many maintenance agreements has the MS4 approved during the reporting period? 2

Do you use an electronic tool (e.g., GIS, database, spreadsheet) to track post-

M. Do all municipal departments and/or staff (as relevant) have access to this tracking

N. Has the MS4 developed a program to allow for incentive standards for redeveloped

## 8. CODES AND ORDINANCES REVIEW AND UPDATE (SECTION 4.2.5.3)

construction BMPs, inspections and maintenance?

□ No

☐ No

⋈ No

⊠ Yes

⊠ Yes

□ Yes

system?

sites?

L.

## Municipal Separate Storm Sewer System (MS4) Annual Report A. Is a completed copy of the EPA Water Quality Scorecard submitted with this report? ✓ Yes ☐ No B. Include status of implementation of code, ordinance and/or policy revisions associated with permanent stormwater management. We updated our Stormwater Regulations to Meet the TDEC standards and adopted the 1" Caputure Regulation into our Stormwater Mangement Manual on 1/21/2014. 9. STORMWATER MANAGEMENT FOR MUNICIPAL OPERATIONS (SECTION 4.2.6) A. Have stormwater pollution prevention plans (or an equivalent plan) been developed for: All parks, ball fields and other recreational facilities ☐ No ⊠ Yes □ No All municipal turf grass/landscape management activities □No ⊠ Yes All municipal vehicle fueling, operation and maintenance activities ⊠ Yes ☐ No All municipal maintenance yards ⊠ Yes ☐ No All municipal waste handling and disposal areas ⊠ Yes □ No Are stormwater inspections conducted at these facilities? B. 1. If Yes, at what frequency are inspections conducted? Inspections are made yearly and relevant staff inspections during regular maintenance activities C. Have standard operating procedures or BMPs been developed for all MS4 field ⊠ Yes □ No activities? (e.g., road repairs, catch basin cleaning, landscape management, etc.) D. Do you have a prioritization system for storm sewer system and permanent BMP П No ⊠ Yes inspections? On average, how frequently are catch basins and other inline treatment systems inspected? Monthly On average, how frequently are catch basins and other inline treatment systems cleaned out/maintained? They are cleaned out before and after major storms and on a routine monthly sweeping and cleaning schedule. G. Do municipal employees in all relevant positions and departments receive □ No comprehensive training on stormwater management? ⊠ Yes ☐ No H. If yes, do you also provide regular updates and refreshers? We hold yearly meetings to review our Pollution If so, how frequently and/or under what circumstances? Prevention Plan/Good Housekeeping plan. 10. STORMWATER MANAGEMENT PROGRAM UPDATE (SECTION 4.4) A. Describe any changes to the MS4 program during the reporting period including but not limited to: Changes adding (but not subtracting or replacing) components, controls or other requirements (Section 4.4.2.a). None at this present time.

Changes to replace an ineffective or unfeasible BMP (Section 4.4.2.b). None

Information (e.g. additional acreage, outfalls, BMPs) on program area expansion based on annexation or newly urbanized areas. No expansion this year.

Changes to the program as required by the division (Section 4.4.3). No changes.

## 11. EVALUATING/MEASURING PROGRESS

## Municipal Separate Storm Sewer System (MS4) Annual Report

A. What indicators do you use to evaluate the overall effectiveness of your Stormwater Management Program, how long have you been tracking them, and at what frequency? Note that these are not measurable goals for individual BMPs or tasks, but large-scale or long-term metrics for the overall program, such as in-stream macroinvertebrate community indices, measures of effective impervious cover in the watershed, indicators of in-stream hydrologic stability, etc.

Indicator	Began Trackii	ng (year)	Frequency	Number of Lo	ocations
Example: E. coli	2003	Weekly	April–September	20	
evaluate the perform	of data (e.g., water qual mance of permanent stor on of current and past pe	mwater controls inst	alled throughout the syst	tem. This evalu	rder to ation may
2. Enforcement (sec	CTION 4.5)				
number of action	f the following types of eas, the minimum measure nich you do not have aut	e (e.g., construction, i	ou used during the repo	rting period, in ent stormwater	ndicate the control) or
Action	Construction	Permanent Stormwater Controls	Illicit Discharge	Authori	ity?
Notice of violation	# <u>0</u>	# <u>0</u>	# <u>0</u>	⊠ Yes	□ No
Administrative fines	# <u>0</u>	# <u>0</u>	# <u>O</u>	⊠ Yes	□ No
Stop Work Orders	# <u>0</u>	# <u>0</u>	# <u>0</u>	⊠ Yes	☐ No
Civil penalties	# <u>0</u>	# <u>O</u>	# <u>0</u>	⊠ Yes	□ No
Criminal actions	# <u>0</u>	# <u>0</u>	# <u>0</u>	⊠ Yes	□ No
Administrative orders	# <u>0</u>	# <u>0</u>	# <u>0</u>	⊠ Yes	□ No
Other	# <u>0</u>	# <u>0</u>	# <u>0</u>		
B. Do you use an el inspection result	lectronic tool (e.g., GIS, s, and enforcement actio	data base, spreadshed ns in your jurisdictio	et) to track the locations n?	' ⊠ Yes	□No
C. What are the 3 n	nost common types of vi of Sediment off site, Not	olations documented posting of permits.	during this reporting pe	riod? <u>Matainand</u>	<u>ce</u>
3. PROGRAM RESOUR	CES (OPTIONAL)				
	annual expenditure to imeriod? \$120,000	plement the requiren	nents of your MS4 NPD	ES permit and S	SWMP this
B. What is next year	nr's budget for implemen	ting the requirement	s of your MS4 NPDES p	permit and SWI	MP?

⊠ No

☐ Yes

Amount \$

If so, what is it/are they (e.g., stormwater fees), and what is the annual revenue derived from this mechanism?

Do you have an independent financing mechanism for your stormwater program?

C.

D.

\$120,000

Source:

## Municipal Separate Storm Sewer System (MS4) Annual Report

Amount \$ Source: How many full time employees does your municipality devote to the stormwater program (specifically for E. implementing the stormwater program vs. municipal employees with other primary responsibilities that dovetail with stormwater issues)? 1 Do you share program implementation responsibilities with any other entities? ☐ Yes □ No F. Your Oversight/Accountability Mechanism Activity/Task/Responsibility **Entity** Provide comments to planning commissioners Site plan review Planning and Codes Review plans for MS4 Compliance MS4 Compliance City Engineer

## 14. CERTIFICATION

This report must be signed by a ranking elected official or by a duly authorized representative of that person. See signatory requirements in sub-part 6.7.2 of the permit.

"I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."

Printed Name and Title

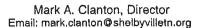
nature

Date

Annual reports must be submitted in accordance with the requirements of Section 5.4. (Reporting) of the permit. Annual reports must be submitted to the appropriate Environmental Field Office (EFO) by September 30 of each calendar year, as shown in the table below:

EFO	Street Address	City	Zip Code	Telephone
Chattanooga	540 McCallie Avenue STE 550	Chattanooga	37402	(423) 634-5745
Columbia	1421 Hampshire Pike	Columbia	38401	(931) 380-3371
Cookeville	1221 South Willow Ave.	Cookeville	38506	(931) 432-4015
Jackson	1625 Hollywood Drive	Jackson	38305	(731) 512-1300
Johnson City	2305 Silverdale Road	Johnson City	37601	(423) 854-5400
Knoxville	3711 Middlebrook Pike	Knoxville	37921	(865) 594-6035
Memphis	8383 Wolf Lake Drive	Bartlett	38133	(901) 371-3000
Nashville	711 R S Gass Boulevard	Nashville	37216	(615) 687-7000

G. Please attach a copy of your Organizational Chart





714 Industrial Parkway Shelbyville, TN 37160 Phone 931.684.2644 Fax 931.684.8993

The City of Shelbyville's Public Works construction crew has done many drainage projects this permit year including regrading and matting many ditches throughout the city. We have been fixing our main ditch erosion problems and working our way down the list and fixing drainage structures to help with our city's water quality. Our main focus has been cleaning culverts and catch basins of waste and fixing our city's drainage infrastructure to keep all Stormwater flowing at its maximum capacity as clean as possible before it makes it to the Duck River.

Eric Pierce

Stormwater Coordinator

Shelbyville, TN.





714 Industrial Parkway Shelbyville, TN 37160 Phone 931.684.2644 Fax 931.684.8993

11a. Evaluating/Measuring Progress

We have been keeping track of the debris picked up buy our street sweeper and our maintenance crews that clean the catch basins and storm drain outfalls on a routine basis. We can measure the overall effectiveness of our program in certain areas and also City wide. This is a good way of tracking progress and seeing what areas of the program need more attention given.

## Annual cleanup day nears for Duck River

Wednesday, June 3, 2015 By JASON REYNOLDS ~ jreynolds@t-g.com

The 18th annual effort to clean up the Duck River will take place Saturday, June 27.

The Duck River Cleanup starting point is at River Bottom Park behind Shelbyville Power, Water and Sewerage System. Registration is at 7 a.m. Volunteers will get their assignments and locations, and should report to registration even if they are using a boat for the cleanup, co-organizer Wayne Bomar said.

## Food and bags

The registration tent will have coffee, doughnuts and biscuits. Volunteers will pick up their litter bags and free T-shirts there as well.

Lunch will be served from 11 a.m.-noon at the registration area.

Co-sponsored by the Shelbyville Bedford County Chamber of Commerce Beautification Committee, Rotary Club and the Duck River Development Agency, the Duck River Cleanup builds awareness for the importance of the river's water quality, and the river's scenic appeal.

## Diverse river

The Nature Conservancy's "Rivers of Life" lists the Duck River as the No. 2 aquatic hot spot in the nation, with 33 at-risk fish and mussel species. The river is considered the most biologically diverse river in North America, with 54 species of freshwater mussels, 24 species of riversnails and 151 fish species.

This is part of a regional cleanup of the Duck River, co-organizer Dawn Holley said.

For more information, call 684-3482 or 684-1693 or go to http://www.facebook.com/duckriverclean.

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714 Industrial Parkway Shelbyville, TN 37160 Phone 931.684.2644 Fax 931.684.8993

Long Term Maintenance Plan (LTMP) and Agreement

For:

Project Name, Phase, and Location

City of Shelbyville Bedford County, Tennessee

Date

Prepared by/Contact Info





\_\_Permeable Pavers/Concrete

# City of Shelbyville Public Works Department

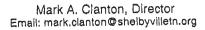
714 Industrial Parkway Shelbyville, TN 37160 Phone 931.684.2644 Fax 931.684.8993 Phone 931.684.2644

Si	te Information		
1)	Project Information  Project Name:  Location:	Tax Map/Pa	se:
2)	Owners Contact Information Respons		
	Name:		
	Name:		
	Address:		
*Ann Engir	nual Inspection reports are to be submitt neering Dept. no later than July 1 <sup>st</sup> of eac	ed by the owner to the City of S th year.	Shelbyville Public Works
3)	Stormwater System Features Locate (check features)	d Onsite	
U	rban Bioretention/Rain Gardens	Infiltration Trenches	Dry Ponds
\	Jater Quality Swales	Grass Swales	Wet Ponds
0	il Grit Separator/Water Quality Unit	Riparian Buffers	Wetland
Pe	ermeable Pavers/Concrete	Green Roof	Storm Sewer



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4)	Check that all the following documents have been attached and included with this submittal form.
	Location Map
	Stormwater Features Location Sheet (Description and locations of stormwater systems to be inspected: include detailed exhibits of the BMP's and a site map showing the location of all BMP's and stream buffers
	Oil Grit Separator/Water Quality Unit 2 year maintenance agreement
	BMP inspection and maintenance form for each MBP located on site
5)	As-builts Upon Completion of the site construction, as -built drawings of the stormwater controls will be provided to the City of Shelbyville Public Works Department for verification.
6)	Maintenance Agreement A copy of the inspection and Maintenance Agreement of Private Stormwater Management Facilities that has been completed, notarized and recorded with the City of Shelbyville, Tennessee will be kept with the document.
7)	Access As agreed to with the Inspection and Maintenance Agreement, the owner shall grant to the City of Shelbyville or its agent or contractor the right of entry at reasonable times and in a reasonable manner for the purpose of inspecting, operation, installing, constructing, reconstructing, maintain or repairing the facility.
8)	Waste disposal Trash and debris collected from the stormwater sewer system shall be properly disposed with a licensed sanitation company. All sediment and debris shall be disposed at a licensed landfill in accordance with all local, state, and federal laws. If any sediment is believed to be contaminate, the Tennessee Department of Environment and Conservation (TDEC)-Division of Water Pollution Control should be contacted at 931-380-3371.
9)	Certification I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
	- A - A - A





714 Industrial Parkway Shelbyville, TN 37160 Phone 931.684.2644 Fax 931.684.8993

	-
Date	

APPENDIX C: Federally Listed Endangered Aquatic Species in the State of Tennessee

					T								
Federal Register Citation		57 FR 14790; April 22,1992	42 FR 45528; Sept. 9, 1977	42 FR 45528; Sept. 9, 1977	42 FR 45528; Sept. 9, 1977	58 FR 25763; April 27, 1993	53 FR 33998; Sept. 1, 1988	58 FR 25763; April 27, 1993	49 FR 43069; Oct. 26, 1984	42 FR 455528; Sept. 9, 1977 Or 53 FR 29337; Aug. 4, 1988	58 FR 25763; April 27, 1993	50 FR 31603; Aug. 5, 1985	50 FR 31603; Aug. 5, 1985
When Listed		462	28	28	28	502	322	502	163	28 Or 317	502	196	196
Extirpated since 11/1975		No	<u>0</u>	No	No	S N	No	Yes*	No	ON.	No	No	No
HUC location of endangered species post-1975		03150101	06010208 06010204 06010104 06010101 06010205 06010206	06010205 06010206 05130108	06040004 06030005 06030002	06010201 05130104 06010201 06010204	06030004 06030003	06010205	06010204	06010206 06010204 06010207	06040003 06010205	05130101	03150101
Post-1975 obs.		8 obs.	21 obs.	10 obs. 1979-1993	10 obs. 1976-1994	10 obs. 1992-2000	11 obs. 1983-2001	1 obs.	15 obs. 1981-1995	6 obs. 1981-1998	4 obs. 1978-1996	3 obs. 1976-1978	4 obs. 1985-2001
Pre- 1975 obs.	Fish	1 obs.	17 obs. 1936- 08/1975	5 obs. 1941-1974	5 obs. 1971-1974	1 obs.	0	1 obs.	1 obs.	5 obs. 1884-1970	1 obs.	3 obs. 1969-1973	3 obs.
Total Obs.		G	38	15	15	1	1-	2	16	7	2	9	7
Status		1	<b> -</b> -	F	<b> </b>	ш	ш	ш	ш	-	ш	ш	ш
Common Name		Blue shiner	Spotfin chub	Slender chub	Slackwater darter	Duskytail darter	Boulder darter	Palezone shiner	Smoky madtom	Yellowfin madtom	Pygmy madtom	Amber darter	Conasauga logperch
Scientific Name		Cyprinella caerulea	Cypninella monacha	Enimystax cahni	Etheostoma boschungi	Etheostoma percnurum	Etheostoma wapiti	Notropis albizonatus	Noturus baileyi	Noturus flavipinnis	Noturus stanauli	Percina antesella	Percina jenkinsi

40 FR 47506; Oct. 9, 1975		49 FR 27514; July 5, 1984	52 FR 22585; June 12, 1987	55 FR 36647; Sept. 6, 1990		51 FR 34412; Sept. 26, 1986		62 FR 1657; Jan. 10, 1997	59 FR 60334; Nov. 23, 1994	55 FR 25595; June 21, 1990	41 FR 24064; June 14, 1976
	ŏ	150 49	273 52 Ju	399 55 Se		242 51		602 62 Ja	563 N	391 56	15 JL
12	ŏ	#	27	38		2		9		က	-
	2		Š	2		Š		S S	Yes*	S S	N N
06020001 06020001 06020002 06010204	06030004 06030004	06010108 06010107 06010201 06020003	05130101	08010100		5130202		05130104 05130107	06010108	05130108 06010205 06020001 06040001	05130108 05130201 06010205 06010206
	44 obs. 1976-2000		26 obs. 1985-2000	3 obs. 1990	ans	57 obs 1981-2000	ca	19 obs. 1978-2000	1 obs. 1992	26 obs 1978-1999	39 obs 1975-1999
	3 obs. 1974- 09/1975		0	0	Crustaceans	0	Mollusca	0	0	4 obs 1936-1974	32 obs 1899-1964
	47		26	က		57		19	•	30	71
	<b>-</b>		-	ш		Ш		ш	ш	m	ш
	Snail darter		Blackside dace	Pallid sturgeon		Nashville crayfish		Cumberland elktoe	Appalachian elktoe	Eastem fanshell peartymussel	Dromedary pearlymussel
	Percina tanasi		Phoxninus cumberlandensis	Scaphirhynchus albus		Orconectes shoupi		Alasmidonta	Alasmidonta	Cyprogenia stegaria (irrorata)	Dromus dromas

						05420404			
Epioblasma brevidens	Cumberlandian combshell	ш	46	0	46 obs 1975-2000	05130104 05130201 05130202 06010205 06010206 06040002	No	602	62 FR 1657; Jan. 10, 1997
Epioblasma capsaeformis	Oyster mussel	ш	38	0	38 obs 1979-2000	05130108 06010205 06010206 06040002	o V	602	62 FR 1657; Jan. 10, 1997
Epioblasma florentina florentina	Yellow-biossom pearlymussel	Ш	25	23 obs 1913-1973	2 obs 1979-1981	05130201	Yes*	15	41 FR 24064; June 14, 1976
Epioblasma metastriata	Upland combshell	ш	-	1 obs pre-1974	0	03150101	Yes*	495	58 FR 14339; March 17, 1993
Epioblasma obliquata obliquata	Purple cat's paw	Ш	2	0	2 obs 1979-1982	05130201	No	394	55 FR 28213; July 10, 1990
Epioblasma forulosa oubemaculums	Green-blossom pearlymussel	ш	13	11 obs 1913-1935	2 obs 1975-1979	06010205 06010206	Yes*	15	41 FR 24064; June 14, 1976
Epioblasma torulosa torulosa	Tubercled-blossom pearfymussel	ш	80	6 obs 1919-1965	2 obs 1981	05130201	Yes*	15	41 FR 24064; June 14, 1976
Epioblasma turgidula	Turgid-blossom pearlymussel	ш	17	16 obs pre-1886- 1972	1 obs 1979	06040003	Yes*	15	41 FR 24064; June 14, 1976
Fusconaia cor (edgariana)	Shiny pigtoe	tП	56	16 obs 1913-1967	40 obs 1975-1998	06010205 06010206 06030003	N <sub>O</sub>	15	41 FR 24064; June 14, 1976
Fusconaia cuneolus	Fine-rayed pigtoe	ш	49	21 obs 1899-1973	28 obs 1978-1998	06010101 06010201 06010205 06010206 06030003	No	15	41 FR 24064; June 14, 1976
Hemistena lata	Cracking pearlymussel	ш	33	9 obs 1914-1970	24 obs 1975-1999	06010205 06010206 06030003 06040001	o N	36	43 FR 12691; March 27, 1978

								-			-		
41 FR 24064; June 14, 1976	41 FR 24064; June 14, 1976	58 FR 14339; March 17, 1993	54 FR 40112; Sept. 29, 1989	53 FR 45865; Nov. 14, 1988	41 FR 24064; June 14, 1976	41 FR 24064; June 14, 1976	58 FR 5642; Jan. 22, 1993	58 FR 14339; March 17, 1993	56 FR 21087; May 7, 1991	41 FR 24064; June 14, 1976	58 FR 14339; March 17, 1993	62 FR 1657; Jan. 10, 1997	41 FR 24064; June 14, 1976
15	15	495	369	342	15	15	488	495	423	15	495	602	15
o <sub>N</sub>	Yes*	No	No	No No	No	N N	No	No	No	No	Yes*	No	No
05130108 05130201 06010104 06010107 06010201 06010207 06020001 06030001	06030002	03150101	05130201 06040001	05130104 05130107 05130108	05130201 06040001	05130201 06010201 06010206 06020001 06040001	5130108 06040001	03150101	05130107 05130108 06030003	05130201 06010205 06020001 06040001	03150101	06010205 06010206	06010206 06030003 06040002
69 obs 1975-2001	1 obs 1995	7 obs 1997-1999	7 obs 1978-1999	6 obs 1981-2000	7 obs 1978-1987	22 obs 1978-1999	3 obs 1978-1992	10 obs 1995-1997	13 obs 1976-1998	14 obs 1979-1998	2 obs 1980-1995	23 obs 1975-1999	30 obs 1975-2001
12 obs 1920-1973	5 obs 1915-1974	1 obs 1973	7 obs 1924-1964	5 obs 1914-1966	4 obs 1956-1964	19 obs 1895-1970	0	1 obs pre-1975	. 0	3 obs 1920-1964	0	1 obs 1960	15 obs 1900-1973
81	9	80	41	=	1	41	က	11	55	17	2	24	45
ш	ш	ш	ш	ш	ш	ш	ш	ш	ш	ш	ш	ш	Ш
Pink mucket pearfymussel	Alabama lampmussel	Coosa moccasinshell	Ring pink mussel	Little-wing pearlymussel	White wartyback bearkmussel	Orange-foot pimpleback pearlymussel	Clubshell	Southern pigtoe	Cumberland pigtoe	Rough pigtoe	Triangular kidneyshell	Rough rabbitfoot	Cumberland monkeyface pearlymussel
Lampsilis abrupta	Lampsilis virescens	Medionidus parvulus	Obovaria retusa	Pegias fabula	Plethobasus	Plethobasus cooperianus	Pleurobema clava	Pleurobema	Pleurobema gibberum	Pleurobema plenum	Ptychobranchus greeni	Quadrula cylindrica strigillata	Quadrula intermedia

						1,200				_
Quadrula sparsa	Appalachian monkeyface pearlymussel	Ш	<del>-</del>	2 obs 1958-1964	9 obs 1976~1998	05130201 06010206	No	15	41 FR 24064; June 14, 1976	
Toxolasma cylindrellus	Pale lilliput pearlymussel	ш	55	10 obs 1886-1970	3 obs 1982-1995	06030002 06040002 06040003	Yes*	15	41 FR 24064; June 14, 1976	
Villosa perpurpurea	Purple bean	ш	10	3 obs 1913-1970	7 obs 1985-2000	06010104 06010208	No	602	62 FR 1657; Jan. 10, 1997	
Villosa trabalis	Cumberland bean pearlymussel	ш	17	4 obs 1913-1939	13 obs 1980-2000	05130104 05130108 06010104 06010208 06020002	No	15	41 FR 24064; June 14, 1976	
				Snails	y <sub>0</sub>					
Atheamia anthonyi	Anthonys River Snail	ш	14	6 obs 1941-1965	8 obs 1975-1994	06010201 06010205 06020004 06030001	N <sub>O</sub>	538	59 FR 17998; April 15, 1994	
Pyrgulopsis (Marstonia)	Pyrgulopsis (Marstonia) Royal marstonia (Obese snail)	ш	4	0	4 obs 1997	03150101	No	538	59 FR 17998; April 15, 1994	1
- Landing				* *			, JAC 1.	ナー・ 1 / 1 / 1 / 1 / 1 / 1 / 1	7	

\*Note: None of the extirpated species have been found on segments listed as partially or non-supporting on the 2002 303(d) List. See the 2002 303 (d) List for endangered species located on partially or not-supporting waterbody segments.

Status: E = Endangered T = Threatened

Waterbody	Impacted Waterbody	County	Miles/Acres Impaired	CAUSE / TMDL Priority	Pollutant Source	COMMENTS
TN06040002 012 - 2000	BIG ROCK CREEK	Marshall	0.6	Nitrate+Nitrite M Total Phosphorus M Loss of biological integrity A due to siltation NA Low dissolved oxygen L		Lewisburg area impacts. Category 5. EPA approved a siltation TMDL that addresses some of the known pollutants.
TN06040002 012 - 3000	BIG ROCK CREEK	Marshall	6.0	Loss of biological integrity due to siltation Physical Substrate Habitat Alterations Low Dissolved Oxygen L		Category 5. EPA approved a habitat/siltation TMDL that addresses some of the known pollutants.
TN06040002 020 - 1000	DUCK RIVER	Bedford	29.8	Escherichia coli		Shelbyville area pathogen sources. Stream is Category 5. (One or more uses impaired.)
TN06040002 021 - 0100	LITTLE SINKING CREEK	Bedford	7.6	Loss of biological integrity due to siltation Alteration in stream-side or littoral vegetative cover NA		Category 4a. EPA approved siltation and pathogen TMDLs that address the known pollutants.
TN06040002 021 – 1000	SINKING CREEK	Bedford	12.0	Loss of biological integrity due to siltation Alteration in stream-side or littoral vegetative cover NA	Pasture Grazing	Category 4a. EPA approved pathogen and siltation TMDLs that address the known pollutants.
TN06040002 024 - 0100	DAVIS BRANCH	Bedford	2.2	Loss of biological integrity due to sittation	Pasture Grazing	Category 4a. EPA approved a sittation TMDL that addresses the known pollutant.
TN06040002 024 - 1000	SUGAR CREEK	Bedford	21.7	Nitrate+Nitrite M Total Phosphorus M Alteration in stream-side or littoral vegetative cover NA Escherichia coli		Category 5. EPA approved a siltation/habitat alteration TMDL that addresses some of the known pollutants.
TN06040002 027 - 0200	BOMAR CREEK	Bedford	4.1	Nutrients M Low dissolved oxygen L		Shelbyville area impacts. Category 5. (One or more uses impaired.)
TN06040002 027 1000	DUCK RIVER	Bedford	1.6	Escherichia coli Loss of biological integrity due to siltation NA		Shelbyville area impacts. Category 4a. EPA approved siltation and pathogen TMDLs that addresses the known pollutants.
TN06040002 030 - 0200	DODDY CREEK	Bedford	2.2	Habitat loss due to flow NA alteration		Category 4c. Impacts are not caused by a pollutant.
TN06040002 030 - 1000	DUCK RIVER	Bedford	12.1	Thermal Modification L Flow Alteration NA Manganese L	Upstream Impoundment	Category 5, flow alteration is 4c (impact not due to pollutant).
			Draft Version	Draft Version 2014 303(d) LIST (Duck River Watershed cont.)	itershed cont.)	

Waterbody	Impacted Waterbody	County	Miles/Acres	CAUSE / TMDL Priority	Pollutant Source	COMMENTS
TN06040002 032 - 0300	CLEAR BRANCH	Coffee	7.3	Alteration of stream-side or littoral vegetation L Total Phosphorus NA Low dissolved oxygen NA Escherichia coli	Dairies Pasture Grazing	Category 5. EPA approved DO, nutrient, and pathogen TMDLs for this stream that address some of the known pollutants.
TN06040002 032 - 0310	MUDDY BRANCH	Coffee	5.1	Alteration of stream-side or littoral vegetation L Total Phosphorus NA Low dissolved oxygen NA Escherichia coli	10-11	Category 5. EPA approved DO, nutrient, and pathogen TMDLs for this stream that address some of the known pollutants.
TN06040002 032 - 2000	DUCK RIVER	Coffee	1.25	Escherichia coli NA		Water contact advisory due to elevated bacteria levels from Manchester area sewer overflows and urban runoff. Category 4a. EPA approved a pathogen TMDL that addresses the known pollutant.
TND6040002	BELL BUCKLE CREEK	Bedford	11.1	Low Dissolved Oxygen L Loss of biological integrity due to siltation Physical Substrate Habitat Alterations Ascherichia coli		Bell Buckle area impacts, inc. Bell Buckle STP. Category 5. EPA approved siltation/habitat alteration and pathogen TMDLs that address some of the known pollutants.
TN06040002 033 - 0600	MUSE CREEK	Bedford	3.0	al integrity n eam-side or tive cover		Category 4a. EPA approved a siltation/habitat alteration TMDL that addresses some of the known pollutants.
TN06040002 033 - 1000	WARTRACE CREEK	Bedford	15.0		-	Category 5. I MULS needed.
TN06040002 038 - 0300	HURRICANE CREEK	Bedford	22.03	Escherichia coli Loss of biological integrity due to siltation Physical Substrate Habitat Alterations		Category 4a. EPA approved siltation/habitat alteration and pathogen TMDLs that address the known pollutants.
TN06040002 038 - 1000	FALL CREEK	Bedford	11.4	Escherichia coli NA		Category 4a. EPA approved a pathogen TMDL that addresses the known pollutant.
TN06040002 039 - 0200	WEAKLEY CREEK	Bedford	6.2	Escherichia coli NA	A Pasture Grazing	Category 4a. EPA approved a pathogen TMDL that addresses the known pollutant.

Draft Version 2014 303(d) LIST (Duck River Watershed cont.)

COMMENTS	Category 4a. EPA approved siltation, nutrient, and pathogen TMDLs that address the known pollutants.	Category 4a. EPA approved siltation and pathogen TMDLs that address the known pollutants.	Category 5. I MDLs needed.	Category 5. EPA approved a nutrient TMDL that addresses some of the known pollutants.	Category 4a. EPA approved siltation, pathogen, and nutrient TMDLs that address the known pollutants.		Stream is Category 5. One or more uses are impaired.	Stream is Category 5. One or more uses are impaired.	Category 4a. EPA approved a pathogen TMDL that addresses the known pollutant.	Category 4a. EPA approved a pathogen TMDL that addresses the known pollutant.	Category 4a. EPA approved a pathogen TMDL that addresses the known pollutant.	Stream is Category 5. One or more uses are impaired.
Pollutant Source	Pasture Grazing	Pasture Grazing	Pasture Grazing	Pasture Grazing	Pasture Grazing	Pasture Grazing	Pasture Grazing	Pasture Grazing	Unrestricted Cattle Access	Unrestricted Cattle Access	Pasture Grazing	Pasture Grazing
CAUSE / TMDL Priority	Loss of biological integrity due to siltation NA Nutrients Escherichia coli	Loss of biological integrity due to siltation Escherichia coli	Escherichia coli H	Escherichia coli H Nutrients NA	Loss of biological integrity due to siltation Nutrients Escherichia coli	Escherichia coli NA Nitrate+Nitrite NA Physical Substrate Habitat Atterations NA	Alterations in stream-side or littoral vegetative cover Loss of biological integrity due to siltation	Alterations in stream-side or littoral vegetative cover	Escherichia coli NA	Escherichia coli NA	Escherichia coli NA	Alteration to stream-side or littoral vegetative cover Loss of biological integrity due to siltation L
Miles/Acres	13.1	21.1	3.7	4.0	9.2	19.5	3.5	3.1	8.8	13.2	3.8	4.87
County	Bedford Rutherford	Bedford Rutherford	Bedford	Bedford	Bedford	Marshall Bedford	Marshall Williamson	Marshall Rutherford	Marshall Rutherford	Marshall Rutherford	Maury Williamson	Coffee
Impacted Waterbody	WEAKLEY CREEK	ALEXANDER CREEK	NORTH FORK CREEK	NORTH FORK CREEK	NORTH FORK CREEK	WILSON CREEK	WEST FORK SPRING CREEK	EAST FORK SPRING CREEK	LICK CREEK	SPRING CREEK	WALLACE BRANCH	SHANKLIN BRANCH
Waterbody	TN06040002 039 - 0250	TN06040002 039 - 0300	TN06040002	TN06040002 039 - 2000	TN06040002 039 - 3000	TN06040002 046 - 1000	TN06040002 047 - 0100	TN06040002	TN06040002 047 - 0300	TN06040002 047 - 1000	TN06040002 049 - 0400	TN06040002 502 - 0220

# Draft Version 2014 303(d) LIST (Duck River Watershed cont.)

Introduction to Exceptional Waters and ORNW in Tennessee

## The Known Exceptional Tennessee Waters and Outstanding National Resource Waters

Tennessee water quality standards require the incorporation of the antidegradation policy into regulatory decisions (Chapter 1200-4-3-,06). Part of policy places on the Division of Water Pollution Control is identification of exceptional Tennessee Waters (previously know as Tier 2) and Outstan Waters (Tier 3). In exceptional waters, degradation cannot be authorized unless (1) there is no reasonable alternative to the proposed activity that w degrading and (2) the activity is in the economic or social interest of the public. In Outstanding National Resource Waters, no new discharges, expa discharges, or mixing zones will be permitted unless such activity will not result in measurable degradation of the water quality.

The Division of Water Pollution Control has compiled the list of waters that follows based on the characteristics of Exceptional Tennessee Waters: National Resource Waters set forth in the regulation by the Tennessee Water Quality Control Board. In general, these are waterbodies with good water and the regulation of the Tennessee Water Quality Control Board. ecological values, valuable recreational uses, and outstanding scenery. Wherever possible, the Division has utilized objective measures to apply the the basis for each listing is provided.

The following factors should be considered:

- 1. The list will be updated regularly and does not include waterbodies that the division has not evaluated. The fact that a waterbody does not ap name does not preclude the possibility that it may be high quality.
- 2. In some cases, only a portion of a waterbody is considered high quality. The extent of each listing is provided.
- 3. This compilation of waterbodies is based on the most recent information obtained by the division and may be reconsidered upon submittal of
- 4. The list is organized in hydrological order. Reviewers should be aware that many waterbodies share the same name. It is our goal to develop locate these high quality waters.

It is our hope that this compilation of high quality waterbodies will provide a valuable planning tool for both the public and the regulated communi antidegradation policy can be directed to Greg Denton, (615) 532-0699, or gregory\_deuton@tn.gov

Search Guldance
Exceptional TN Streams

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Actions Help

County = 'Bedford' W: &

HUÇ	Watershed Name	Waterbody	County	Description	Basis for inclusion	From Lat	To Lat	From Long	To Long	Inclus
06040002	Duck-Upper	Duck River	Bedford	From RM 221.4 upstream of Hwy 231 to Normandy Dam.	State threatened Coppercheek Darter, Ashy Darter, and Barrens Darter.	35.481	35.465	-86,4828	-86,2468	
06040002	Duck-Upper	Fall Creek	Bedford	From Duck River to headwaters.	State threatened Striated Darter.	35.5418	35.6031	-86.5424	-86,453	
06040002	Duck-Upper	Flat Greek	Badford	From Duck River to headwaters.	State threatened Coppercheek Darter, Striated Darter and Ashy Darter.	35.4708	35,3918	-86,487	-86.4073	73.00
08040002	Duck-Upper	Garrison Fork Creek	Bedford	From Duck River to confluence of Straight Creek.	State threatened Ashy Darter and Striated Darter.	35.4788	35.5527	-86,3325	-88.286	
06040002	Duck-Upper	Hurricane Creek	Bedford	From Fall Greek to headwaters.	State threatened Striated Darter.	35.5646	35.5755	-86,5079	-86.3862	
06040002	Duck-Upper	Kelly Creek	Bedford	From Wartrace Creek to	State threatened Striated Darter.	35,5912	35.6323	-86.3384	-86.3072	

Creek to headwaters

P <sub>e</sub>	06040002	Duck-Upper	North Fork Greek	Bedford	From Duak River to Alexander Greek.	State threatened Striated Darter.	35.5834	35.5932	-86.6421	-86.5417	
1	06040002	Duck-Upper	Sugar Creek	Bedford	From Duck River to headwaters.	State threatened Coppercheek Darter.	35,4801	35.3849	-86.5103	-86.4863	
L	06040002	Duck-Upper	Wartrace Creek	Sedford	From Garrison Fork Creek to headwaters.	State threatened Striated Darter.	35.5073	35.6538	-86.334	-86.3076	
	06040002	Duck-Upper	Stokes Branch	Bedford	From Garrison Fork to Pannell Branch.	State threatened Stricted Darter.	36.5072	35.519	-86.3348	-86.3548	
****	06040002	Duck-Upper	Pannell Branch	Bedford	From Stokes Branch to headwaters.	State threatened Striated Darter.	35.519	35.5451	-88.3551	-88.3879	
	06040002	Duck-Upper	Duck River Unnamed Tributary	Bedford	From Buck River near river mile 194 to origin.	State threatened Yellow Sunnybell.	35.5816	35,5586	-86.6281	-86.6246	NOV-1
,	06040002	Duck-Upper	Weakley Greek Unnamed Tributary	Bedford	From River Mile 0.9 of Weakley Greek to origin.	State threatened Yellow Sunnybell.	35.6035	35.8077	-86.5805	-86,566	NOV-1

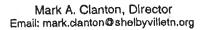
1 - 13 of 13

#### Abbreviations

NF = National Forest NM = National Monument NMP = National Military Park NP = National Park NRA = National Recreation Area NRRA = National River and Recreation Area NW = National Wilderness NWR = National Wildlife Refuge ONRW = Outstanding National Resource Water RM = River Mile SAA = State Archaeological Area SHP = State Historic Park SNA = State National Area SP = State Park WA = Wilderness Area WMA = Wildlife Management Area WR = Wildlife Refuge









714 Industrial Parkway Shelb Phone 931.684.2644 Fax

Shelbyville, TN 37160 Fax 931.684.8993

Water Quality Priorities[Section 3.1] B.

Duck River TN 06040002020-100 E.Coli

Duck River TN 06040002027-1000

E .Coli/Siltation

Hurrricane Creek 06040002038-0300 E.Coli/Siltation

Bomar Creek 06040002027-0200 Nutrients/Low D.O.





714 Industrial Parkway Shelbyville, TN 37160 Phone 931.684.2644 Fax 931.684.8993

MS4 Discharge To E.T.W Section 2.D.

Duck River TN 06040002020-100 E.Coli

Duck River TN 06040002027-1000

E .Coli/Siltation

The following is a list of the Federally Listed Species for the upper Duck river Watershed..



## Department of Environment & Conservation



Rare Species by Watershed Rare Species by County Rare Species by Quadrangle Stormwater Programs

⇒ Help

(2) Key to Status and Ranks

Rare Species by County

Rows 15 Actions

\*\* Row text contains bedford\* F 🛠

5 of 40 >			and the control of th	Global Rank	Fed. Status	St. Status	Habitat	State Rank
County	Туре	Scientific Name	Common Name	G3G4	No Status	D	Rocky, clear creeks and rivers with large shelter rocks.	S3
diord	Animal Vertebralie	Cryptobranchus alleganiensis Cynnophilus	Tennessee Cave Salamander	G2G3	**	Т	Aquatic cave obligate; cave streams & rimstone pools; Central Basin, Eastern Highland Rim, & Cumberland Plateau.	S2
	Venebrale	ichithyomyzon gagei	Southern Brook Lamprey	<b>G</b> 5	4	D	Gravel and sand riffles and runs of small rivers and creeks; Conasauga & lower Tennessee river watersheds.	S1
ediord	Animal Vertebrate	Hernitramia, flammes.	Flame Chub	G3		D	Springs and spring-fed streams with lush aquatic vegetation; Tennessee & middle Cumberland river watersheds.	S3
ediorii	Arene		Bedrock Shiner	G2		D	Bedrock pools of some low- gradient streams of the Nashville Basin.	S2
ediord	Vertebrate  Vertebrate	Nourus fascalus	Saddled Madtorn	G2	(4)	т	Rocky riffles, runs, and flowing pools of clear creeks & small rivers; Duck River system and nearby tributaries of the Tennessee River.	S2
Bedlord	Anemal	Funduks Missa	Barrens Topminnow	G1	) ke	E	Springs, spring runs, and first- and second-order headwaters and creeks in the Barrens of Cannon, Coffee, & Warren countles.	S1
Bedlord	Animal	FUNDALS MAZZA		0003		Т	Primarily in deep nitles, runs, and flowing pools; Duck and Buffalo River watersheds.	\$2\$3
Bedford	Versebrate Animal	Etheostoma actuali	Coppercheek Darter	G2G3	<u> </u>	Т	Small to medium upland rivers with bedrock or gravel substrate and boulders.	\$2\$3
Bedford	Vertebrate Animal	Etheostoma cinereum	Ashy Darter	G2G3		D	Limestone streams; Nashville Basin & portions of Highland Rim.	S4
Bedford	Vertebrate Animal	Etheostoma luteovinctum	Redband Darter	G4		T	Bedrock pools of headwaters and creeks with large slabrock cover; upper Duck River	S1
Bedford	Vertebrate Animal	Etheostoma striatulum	Striated Darter	G1		Rare, Not	Medium to large rivers in shall	ow S2
Bedford	Vertebrate Animai	Etheostoma denoncourti	Golden Darler	G2		State Listed	Clear, larger upland creeks a	nd ocky S2
Bedicia		e Percins	Longhead Darter	G3	<b>9</b>	r	flowing pools upsutified filles; Tenn & Cumb river watersheds.	
Bedford	Vertebrat Animal	Macrocephala	Sienderhead Dari	er G5		D	Small-large rivers with mode gradient in shoal areas with moderate-switt currents; por of Tenn & Cumb river watersheds.	lions S3
Bedford	i Vertebra Animal	ohoxocephala	Oldinastrone		LE	E	Cave obligate year-round; frequents forested areas; migratory.	S2
Bedford	Animal	OUOXOCEDITER	G-v Montis	G3	LE	E	Cave obligate year-round; frequents forested areas;	

1 - 15 of 40 >



If you have any questions or comments, Email ask.tdec@tn.gov or call at (888) 891-TDEC (8332).





> Help

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Rare Species by County

Actions Rows 15 🖫 🌱 Row text contains 'bedford' 🔽 🐒

< 16 - 30 of 40 ≥ 1

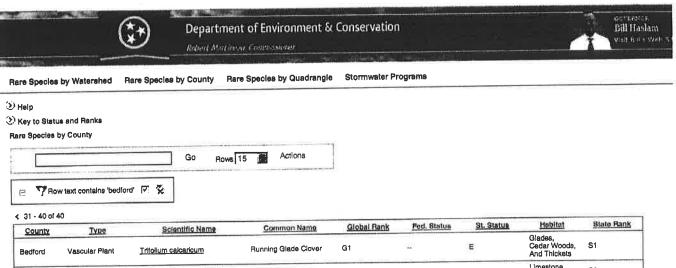
County	Туре	Scientific Name	Common Name	Global Rank	Fed. Status	St. Statue	Habitat	State Rank
edford	Vertebrate Animal	Myotis sodalis	Indiana Myotis	G2	LE	E	Hibemales in caves; spring/summer maternity roosts are normally under the bark of standing trees.	S1
Bedford	Vertebrale Animal	Neotoma magister	Allegheny Woodret	G3G4	1.6	D	Outcrops, cliffs, talus slopes, crevices, sinkholes, caves & karst	83
Bedford	invertebrate Animal	Gomphus sandrius	Tennessee Clubtall	G1	360	Rare, Not State Listed	Slow streams with bare bedrook shores; Central Basin; upper Duck River and middle Cumberland River watersheds.	\$1
Bedford	Invertebrate Animai	Lexingtonia dolabelloldes	Slabside Pearlymussel	G2	С	Rare, Not State Listed	Lg creeks to mod sized rivers, in riffles/shoals of sand, fine gravel, and cobble substrates with mod current; Tennessee R watershed.	S2
Bedford	Invertebrate Animal	Oboyaria subrotunda	Round Hickorynut	<b>Q</b> 4	#	Rare, Not State Usted	Medium-large rivers in sand and gravel subst with moderate flow; TN & Cumb rivers; also Red River in Robertson Co., W Highland Rim.	S2S3
Bedford	invertebrale Animal	Ptychobranchus subtentum	Fluted Kidneyshell	G2	С	Rare, Not State Listed	Small-medium rivers in swift current or riffles, in sand, gravel, and cobble substrates; Tennessee & Cumberland river systems.	S2
Bedford	Invertebrate Animal	Quadruja cylindrica cylindrica	Rabbitsfoot	G3G4T3	**	Rare, Not State Usted	Large rivers in sand and gravel; Tennessee & Cumberland systems; big river form of Q. cylindrica.	S3
Bedford	Invertebrate Animal	Lithesia duttoniana	Helmet Rocksnall	G2Q	(60)	Rare, Not State Listed	Rocky substrates in riffle systems; bedrock in flowing water below main section of riffles; Duck River (TN River system).	S2
Bedford	Invertebrate Animal	Lithasia geniculata fullginosa	Geniculate River Snall	G3T3Q	#E.	Rare, Not State Usted	Medium-sized river form of L. geniculata; portions of lower Cumberland and lower Tennessee river systems; Duck & Buffalo rivers.	S2
Bedford	Vascular Plant	Amsonia tabemaemontana yar, gattingeri	Limestone Blue Star	G5T3Q	3 <b>4</b> 7	s	Glades, Barrens, And Rocky River Bars	S3
Bedford	Vascular Plant	Amoglossum plantagineum	Fen Indian-plantain	G4G5	Seat)	Т	Moist Prairies And Marshes	S2
Bedford	Vascular Plant	Leavenworthia exigua var. exigua	Glade-cress	G4T3		S	Glades	S3S4
Bedford	Vascular Plant	Pavsonia densipila	Duck River Bladderpod	G3	99.	Т	Cuitivated Fields	S3
Bedford	Vascular Plant	Astragalus tennesseensis	Tennessee Milk- vetch	G3	2 <b>11</b> :	S	Glades	S3
Bedford	Vascular Plant	Dalea follosa	Leafy Prairie-clover	G2G3	LE	E	Rocky Washes In Glades	S2S3

<sup>&</sup>lt; 16 - 30 of 40 >



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County	Type	Scientific Name	Common Name	Global Rank	Fed. Status	St. Status	Habitat	State Bank
Bedford	Vascular Plant	Tritolium calcaricum	Running Glade Clover	G1	9E)	E	Glades, Cedar Woods, And Thickets	S1
Bedford	Vascular Plant	Oenothera macrocarpa	Missouri Primrose	<b>G</b> 5		Т	Limestone Cedar Glades	S2
Bedford	Vascular Plant	Polygala boykinli	Boykin's Milkwort	G4	552	T	Glades	S2
Bedford	Vascular Plant	Phemeranthus calcaricus	Umestone Fame-flower	G3	-2	S	Glades	S3
Bedford	Vascular Plant	Anemone caroliniana	Carolina Anemone	G5		E	Giades And Cedar Woodlands	S1S2
Bedford	Vascular Plant	Rosa virginlana	Virginia Rose	<b>G</b> 5	740	s	Umestone Barrens And Swamps	SH
Bedford	Vascular Plant	Schoenolirion croceum	Yellow Sunnybell	G4	544	Т	Wet Areas In Glades	S3
Bedford	International Vegetation Classification	Daiea foliosa - Mecardonia acuminata - Mitreola petiolata Herbaceous Vegetation	Limestone Glade Streamside Meadow	G27	1944 1944	Rare, Not State Listed	No Data	S2?
Bedford	International Vegetation Classification	Eleocharis compressa - Schoenolirion croceum - Carex crawel - Allium cemuum Herbaceous Vegetation	Central Basin Umestone Seep Glade	G2?	#	Rare, Not State Listed	No Data	SNR
Bedford	International Terrestrial Ecological System Classification	Nashville Basin Umestone Glade	Nashville Basin Limestone Glade, Barrens, and Woodland	GNR		Rare, Not State Listed	No Data	SNR

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